KEL®

Preliminary Data Sheet

FR301 THRU FR307

3.0AMP. Fast Recovery Rectifiers

AXIAL LEAD
DO-201AD

VOLTAGE:50 TO 1000V **CURRENT:3.0A**

Specification Features:

- Case: Epoxy, Molded
- Weight: 1.20Gram (Approximately)
- High current capability, Low leakage current
- High surge current capability
- Finish: All External Surfaces Corrosion Resistant And Terminal Leads Are Readily Solderable
- Lead And Mounting Surface Temperature For Soldering Purposed: 260℃ Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant
  Cathode Indicated By Polarity Band

DEVICE MARKING DIAGRAM

FR30X : Device Name FR301~ FR307
KEL : KEL Logo

Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Parameter	Symbol	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum DC Blocking Voltage	V_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectifier Current. (0.375" Lead Length @ T_A=75℃)	$I_{F(AV)}$	3.0							A
Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave)	I_{FSM}	150							A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150							°C
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	20							°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

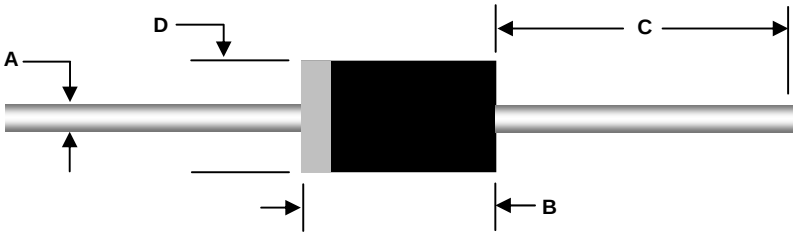
Parameter	Symbol	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	Units
Reverse Current @V_R	I_R	5							uA
Forward Voltage @3A	V_F	1.3							V
Maximum Reverse Recovery Time (Note 2)	T_{RR}	150				250	500		nS
Total Capacitance @VR=4V, f=1MHz	C_T	50							pF

NOTE: (1) Thermal resistance from junction to ambient at 0.375" lead length, vertical P.C. board mounted
(2) Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Package Outline

Package	Case Outline

DO-201AD



DIM	DO-201AD			
	Millimeters		Inches	
	Min	Max	Min	Max
A	1.19	1.30	0.046	0.052
B	7.20	9.60	0.285	0.375
C	25.40	---	1.000	---
D	4.80	5.30	0.190	0.210